DOCKET FILE COPY ORIGINAL

92-257

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of

Amendment of the Commission's Rules Concerning Maritime Communications	)	RM-7956
	)	RM-8031
	)	

The National Marine Electronics Association (NMEA) respectfully submits this it's comments to the above referenced Notice of Proposed Rule Making and Notice of Inquiry.

The NMEA is a trade association of approximately 350 members who are manufacturers and servicing dealers of Marine Electronic Communications and Navigation equipment. The members of NMEA design, manufacture, install and maintain the comunications equipment in the Maritime Industry. Furthermore, the recipients of the products and services of the members of NMEA are the end user, boat owners and the mariners who will be affected by the results of the NPRM/NOI. This direct contact with the maritime community, which includes vessels of all types and sizes, gives the members of NMEA a unique insight into the problems and needs of current and future maritime communications.

INTRODUCTION - BACKGROUND - DISCUSSION

In the opening paragraph of the NOI, the brief synopis of the history of maritime communications points out that the primary purpose is safety and states that many changes to maritime communications can be attributed to maritime diasters. The NMEA

frequencies or from legal frequencies assigned to the land-mobile industry in the maritime VHF spectrum. The NMEA believes that until new technologies can be implemented and spectrum efficiency can be accomplished, an immediate partial relief from congestion and interference can be obtained by strong and firm enforcement of current regulations and proceedures. Several current and future technical regulations will have an affect on improper use that causes interference. The automatic timer for VHF radios will help to solve the common mis-use practice of long, idle conversations and playing broadcast music on marine VHF channels. However, allowing existing radios to remain in use indefinitely virtually eradicates the effectivess of this device. Requiring minimal DSC at some future date will provide self-identification and be a major deterrant to improper and illegal interference and congestion if a forthright plan for implementation is included in the Commission's overall strategy to improve maritime communications.

The NMEA agrees with the Commission that simply permitting a new technology may not result in it's widespread use. The

A. INQUIRY

TELECOMMUNICATIONS REQUIREMENTS
Paragraph 12

In the survey conducted among the members of NMEA, the most often cited needs of the boating community are Automatic Telephone Interconnect, sending of fax and data between vessels and ship to shore, voice mail and even video technology. Some Public Coast Stations have a need for remote receiver relays to filling gaps cause by terrain that masks the signal from low power ship's equipment and low antenna sites on board the vessel. Many small Private Coast Stations such as marinas and boatyards have a need for repeater type operations to allow them to respond to a vessel call from their portable radios licensed under a marine utility station. All of these future needs would require additional channels in the present VHF marine spectrum. Re-allocation of the VHF marine channels currently assigned in the United States to the private land mobile industry, that are allocated for maritime services internationally, would add a minimum of 6 duplex channels. The most logical method for adding channel capacity is narrow-band technology.

Some other services are already providing relief to the maritime needs by the use of cellular radios and in some cases land-mobile systems. Allowing private coast stations to be licensed to use new technologies such as ACSB could also provide relief. However, any other system or services should only be recognized for the purpose they serve. The requirement for

safety and communications between vessels and between vessels and coast stations can only be satisfied through services specifically dedicated for maritime use.

TECHNOLOGY
Paragraph B

New technologies including narrow band, trunking and digital selective calling are commented on in subsequent paragraphs.

The international community is also considering the problem of regulations and technical requirements that have tended to impede the growth of technology and reducing the world-wide problem of congestion in maritime communications needs. Removing the designation of non-commercial and commercial from certain channels may provide relief from congestion in certain areas that have either a high concentration of pleasure craft or fishing vessels.

TRUNKING

The current concept of trunking as used in the land-mobile industry does not have an appeal to current Public Coast Station operators due to the high cost of trunked systems. Allowing Public Coast Stations additional channels and a modified form of trunking that allows a ship station to select an unused channel automatically is more practical. Promoting ACSB among private coast stations that serve fleets that they own or serve may promote trunking which is available with ACSB. Moving large tug boat fleets, fishing fleets or other large commerical fleets to

other services to satisfy their private communications needs would also help to reduce congestion.

DIGITAL SELECTIVE CALLING

The NMEA has long supported the Coast Guard petition to require minimal DSC capability. The NMEA comments to support the Coast Guard petition is attached to these comments. In addition the NMEA believes that DSC should be the only selective calling systems for distress and calling and DSC should be allowed on

channel to private coast stations. Private coast stations should be encouraged to offer services already available under Part 90.

PERMISSIBLE COMMUNICATIONS

Public coast stations should be allowed to serve land vehicles during off peak periods on a secondary basis.

INTRA-SERIVCESHARING

The NMEA supports intra-service sharing. Private coast stations should be allowed the use of un-used public coast station frequencies in the 2-4MHZ band. Regarding the VHF band, except for those reserved for safety and calling, eliminating the designation for non-commercial/commercial from those channels designated for ship to ship and ship to private coast stations should be allowed.

AUTOMATIC INTERCONNECTION WITH PSTN

Automatic interconnect should be allowed. DSC can provide the necessary caller ID since that is a requirement even in the minimal DSC concept. Automatic interconnect should be permitted but not mandatory. Requiring minimal DSC according to the Coast Guard petition is sufficient. If technical requirements and regulations are more permissive, the cost of a minimal DSC radio will not deter inplementation of DSC and other inovations and capabilities will follow as market-driven developements.

Automatic inter-connect should have no bearing on maritime safety. The relationship is between a manual operator required distress system and an automated DSC distress system. The GMDSS is a state of the art automated distress system designed for minimum operator intervention. Once fully implemented, distress alerting and monitoring will be the responsibility of the Search and Rescue (SAR) organization. In the United States this is the Coast Guard. Under GMDSS, coast stations must defer acknowledgement of a distress alert for a short interval to allow the rescue center to respond. Having automatic telephone interconnect with no operator assistance should not have an effect on this automated distress system.

SPECTRUM

NARROW BAND

The NMEA has been following the international effort in CCIR to study the recommendation for 12.5 KHZ narrowband spacing in the maritime VHF spectrum. The most logical first step for more efficient use of the spectrum or introduction of new technology is to provide more channels which can only be accomplished with narrowband. In considering the factors involved to implememt NBFM, cost will not be a major hinderance. The manufacturer members of NMEA have indicated that the major cost is in receiver design to increase selectivity and sensitivity. Many of the manufacturers of marine VHF radios also produce radios for the land-mobile industry and therefore already have the

production capabilities for NBFM radios. Since a key factor to

utilization of idle frequencies, the problems addressed in the NOI are specifically those of maritime communications. Consideration of sharing already congested maritime VHF Channels is not timely. Furthermore, protection from interference to VHF maritime public coast stations is not adequate.

Respectfully submitted

National Marine Electronics Association

by Robert H. Sassaman

Robert H. Sassaman
Executive Director

Date this 31 day of May 1993.

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the matter of	)	
Amendment of Parts 80 of the Commission's Rules to include minimum requirements for Digital Selective Calling in Maritime Ship and Coast Station Equipment sold in the United States	)	RM-8031

To: The Commission

SUPPORT OF THE NATIONAL MARINE ELECTRONICS ASSOCIATION TO THE PETITION FOR RULEMAKING

The National Marine Electronics Association (NMEA) respectfully submits this it's comments to support the above referenced petition for rulemaking by the United States Coast Guard, U.S. Department of Transportation.

I.
Introduction

1. The National Marine Electronics Association (NMEA) is a

simply reactive, fostered by industry awareness of the hazards of mariners and their vessels and the need for communications and navigational devices to ensure their safety.

3. During the latter part of 1991 and in early 1992, the NMEA informed it's members of the pending Coast Guard petition to the FCC. Discussions were conducted with communications equipment manufacturers regarding engineering and production timing and the cost impact to provide a minimal DSC capability to newly designed maritime radios. Subsequently, a list of all known manufacturers or suppliers of maritime radios in the United States was furnished to the Coast Guard to permit them to solicit comments and information pertaining to the petition.

II.
Comments

4. The Coast Guard in it's petition notes that as of 1 February 1999, those vessels subject to the SOLAS Convention and the requirements of GMDSS, will no longer manually monitor VHF channel 16 and 2182 KHZ on MF/HF maritime radios. The Commission, in their Notice Of Proposed Rulemaking on GMDSS, noted that the present manual system is dependent on a continuous watch on distress frequencies. Furthermore, in the Report and Order on GMDSS, under Section III Discussion, sub-section C, paragraph 8.44, the Commission notes that their proposal is to eliminate the ships watch on 2182 KHZ and VHF Channel 16 in agreement with the international GMDSS provision,

stating that ship's equipped with DSC will use DSC frequencies in lieu of 2182 KHZ or VHF Channel 16 to communicate when passing or for distress communications.

5. The petition expresses concern that once GMDSS is fully implemented, the mandatory equipped SOLAS vessels using DSC and no longer manually monitoring distress and safety frequencies will not be able to be contacted by those vessels not equipped with DSC such as fishing vessels, pleasure craft and all other non-compulsory vessels. The NMEA has a much greater concern than the Coast Guard's concern for certain vessels not being able to communicate. This concern further supports the petition.

6. The NMEA concern is for the hundreds of thousands of vessels and mariners excluded from a modern and automated distress system. The GMDSS, and under the conditions of it's implementation by the Commission in the United States, only addresses those compulsory vessels of 300 gross ton and over and certain passenger vessels. Various estimates of U.S. vessels in those categories range from 350 to 500 vessels. The initial reaction from the U.S. Marine Electronic industry with approximately 40 maritime radio manfacturers or distributors to such a limited market was not conducive to any effort to produce new radios with DSC capability.

in the U.S. to be required to include DSC. The petition further suggests that the Commission consider an earlier date. The NMEA manufacturer members have already indicated they can have low-cost DSC radios available sooner than 1997 and actually, because of the Coast Guard efforts and with the interest generated by the intended petition, will begin producing low cost DSC radios in the near future. In addition, several countries have enacted regulations to require their vessels to meet GMDSS regulations as early as 1995. In the petition, the Coast Guard stated their plans to begin installing MF DSC services in 1994 and VHF DSC services in 1995. The NMEA recommends that the wording for the requirement date and the date should be changed. Citing the Commission's Final Rule, PR Docket No. 90-26 which requires an automatic timing device to deactivate VHF ship transmitters and the language of amended Part 80.203(C) of the Commission's Rules, the NMEA respectfully asks the Commission to consider requiring the petitioned minimal DSC for all radios "manufactured in or imported into the United States on or after February 1, 1995 or are initially installed on or after February 1, 1996". This requirement will not create a burden on manufacturers and will allow mariners the availability of DSC to communicate with SOLAS vessels that equip with DSC sooner than 1999 and the use of the SAR network in the U.S. as soon as it becomes available.

11. For the reasons stated herein, the National Marine Electronics Association fully supports the Coast Guard petition

and urges the commission to expedite it's procedures to issue a Notice of Proposed Rulemaking.

The NMEA appreciates the opportunity to furnish comments on this and other proceedings before the Commission.

Respectfully submitted

National Marine Electronics Association

by Robert H. Sassaman

Robert H. Sassaman
Executive Director

Date this 27 day of July 1992.